



Thank you for purchasing RYOBI™ Phone Works™

If you need assistance  
**DO NOT RETURN TO THE STORE**  
Please contact us at 1-877-578-6736

**This app is optimized for:**

iOS versions 6.0 and higher • Android versions 4.0 and higher

For a full list of compatible phones please visit  
[www.ryobitools.com/phoneworks](http://www.ryobitools.com/phoneworks)

## ES1600 LASER LEVEL IMPORTANT SAFETY INSTRUCTIONS

### **⚠ WARNING!**

**READ AND UNDERSTAND ALL INSTRUCTIONS.** Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

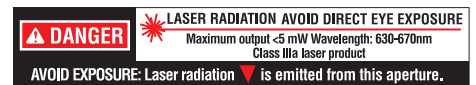
### **⚠ WARNING:**

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### **⚠ WARNING:**

Use of controls, adjustments, or performance of procedures other than those specified here can result in hazardous radiation exposure.

- **Read operator's manual carefully. Learn the applications and limitations, as well as the specific potential hazards, related to this device.** Following this rule will reduce the risk of electric shock, fire, or serious injury.
- **Do not operate battery devices in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Battery devices create sparks which may ignite the dust or fumes.
- **Do not disassemble the device.** Contact with internal parts may increase the risk of electric shock or cause damage to the device.
- **Do not use on a ladder or unstable support.** Stable footing on a solid surface enables better control of the device in unexpected situations.
- **Do not store the device in an area of high heat or humidity. Do not expose the device to extended high heat from the sun (such as on a vehicle dashboard.) To reduce the risk of serious personal injury, do not store outside or in vehicles.** Damage to the device or the battery can result.



### **⚠ WARNING**

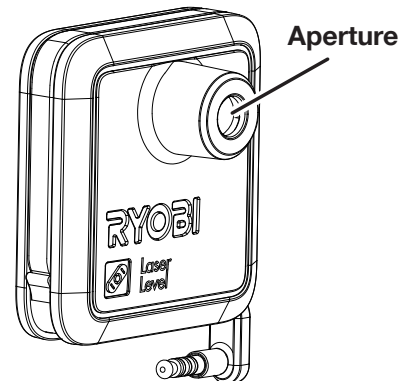
**AVOID EXPOSURE:** Laser radiation emitted from this aperture.

### **⚠ AVERTISSEMENT**

**EVITER L'EXPOSITION :** Rayonnement laser émise de cet orifice.

### **⚠ ADVERTENCIA**

**EVITE LA EXPOSICIÓN:** Radiación laser se emite por esta abertura.






- **Do not expose device to rain or wet conditions.** Water entering a device will increase the risk of electric shock.
- **Use the device in accordance with these instructions and in the manner intended for the device, taking into account the environmental conditions and the work to be performed.** Use of the device for operations different from those intended could result in a hazardous situation.
- **The laser guide radiation used in the laser level is Class IIIa with < 5mW and 630-670nm wavelengths.**
- **Avoid direct eye exposure when using the laser and do not project the laser beam directly into the eyes of others.** Serious eye injury could result.
- **Do not remove or deface any product labels.** Removing product labels increases the risk of exposure to laser radiation.
- **Do not place the device in a position that may cause anyone to stare into the laser beam intentionally or unintentionally.** Serious eye injury could result.

# IMPORTANT SAFETY INSTRUCTIONS



- **Do not operate the laser device around children or allow children to operate the tool.** Serious eye injury could result.
- **Always turn the laser off when not in use.** Leaving the laser on increases the risk of someone inadvertently staring into the laser beam.
- **Do not operate the device in combustible areas such as in the presence of flammable liquids, gasses, or dust.**
- **Always ensure the laser beam is aimed at a surface without reflective properties.** Shiny reflective materials are not suitable for laser use.
- **The laser shall be used and maintained in accordance with the manufacturer's instructions.**
- **Never aim the beam at a person or object other than the target surface.**
- **Handle the device with care.** Treat it as you would any other optical device such as a camera or binoculars.
- **Avoid exposing the device to shock, continuous vibration, or extreme hot or cold temperatures.** Damage to the device and/or serious injury to the user could result.
- **Ensure the device is disconnected before inserting or changing batteries.**
- **Do not mix old and new batteries or different brands of batteries.**
- **Remove batteries from the device when not in use for an extended time.**
- **Always replace the alkaline battery with the same type of alkaline battery.** Use of any other battery packs may create a risk of injury and fire.
- **This device should not be operated unless the battery compartment is closed.**
- **Do not place battery devices or their batteries near fire or heat.** This will reduce the risk of explosion and possibly injury.
- **Do not crush, drop or damage battery. Do not use batteries that have been dropped or received a sharp blow.** A damaged battery is subject to explosion. Properly dispose of a dropped or damaged battery immediately.
- **Batteries can explode in the presence of a source of ignition, such as a pilot light.** To reduce the risk of serious personal injury, never use any battery device in the presence of open flame. An exploded battery can propel debris and chemicals. If exposed, flush with water immediately.
- **Under extreme usage or temperature conditions, battery leakage may occur. If liquid comes in contact with your skin, wash immediately with soap and water. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention.** Following this rule will reduce the risk of serious personal injury.
- **Save these instructions.** Refer to them frequently and use them to instruct others who may use this device. If you loan someone this device, loan them these instructions also.

# SYMBOLS

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOL	SIGNAL	MEANING
	<b>DANGER:</b>	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	<b>WARNING:</b>	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	<b>CAUTION:</b>	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	<b>NOTICE:</b>	(Without Safety Alert Symbol) Indicates important information not related to an injury hazard, such as a situation that may result in property damage.

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the product better and safer.

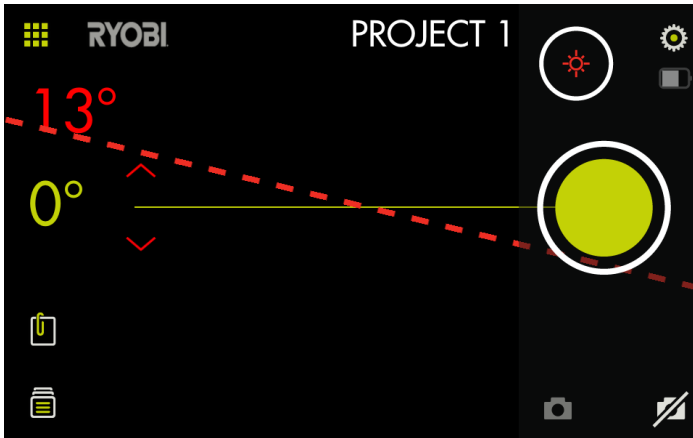
SYMBOL	NAME	DESIGNATION/EXPLANATION
	Safety Alert	Indicates a potential personal injury hazard.
	Read Operator's Manual	To reduce the risk of injury, user must read and understand operator's manual before using this product.

# FEATURES

## YOU MAY USE THE LASER LEVEL FOR THE FOLLOWING PURPOSES:

- Hanging pictures, wallpaper and wallpaper borders
- Lining up floor or wall tile
- Lining up electrical outlets
- Creating decorative angles for faux painting
- Find horizontal and plumb levels
- Set and measure custom reference level angles
- Capture, save, and share images on your smartphone
- Record a voice note in saved files
- Save and access previous projects
- Compatible with most tripods (not included).

# FEATURES



ICON	DESCRIPTION/FUNCTION
	Main RYOBI™ Phone Works™ app home screen
	Current angle of the projected laser beam
	Reference laser angle line (current angle of laser)
	Notes

ICON	DESCRIPTION/FUNCTION
	Desired angle being searched
	Adjust desired-angle line in one-degree increments
	Save or access projects in file cabinet
<b>PROJECT 1</b>	Displays current project name
	Laser is on or off
	Settings
	Device battery level
	Take a picture
	Turn camera off
	Turn camera on
	Share

# ASSEMBLY

## WARNING:

Do not use this product if it is not completely assembled or if any parts appear to be missing or damaged. Use of a product that is not properly and completely assembled or with damaged or missing parts could result in serious personal injury.

## WARNING:

Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

If any parts are damaged or missing, please call 1-877-578-6736 for assistance.

# OPERATION

## INSTALLING/REMOVING THE AAA BATTERY

See Figure 1.

One AAA battery is preinstalled in the unit. Before first use, locate and remove the red pull tab to activate the battery.

- Disconnect the smartphone from the device.
- Remove the clip from the device.
- Remove the battery cover by inserting the edge of a coin into the slot on the bottom and twisting.
- Install the battery according to the polarity indicators.
- Replace the battery cover, making sure the notches align, and press it securely into place before attaching to the clip.
- Do not use the device without the battery cover installed.

**NOTE:** Remove the battery for storage when device will not be used for long periods of time.

## ATTACHING THE PHONE CLIP TO THE LASER LEVEL

See Figure 2.

The phone clip expands to fit most smartphones. Always install the clip before attaching your smartphone.

- Align the hook-and-loop sections of the laser level to the matching portion of the clip.
- Make sure the two notches match and line up.
- With both thumbs, press the clip in the middle until you hear a “click”.
- Make sure clip is securely attached to the laser level.

### ⚠ CAUTION:

Always remove your smartphone when attaching the clip to the device. Pressing on the glass surface of the smartphone could cause breakage and result in personal injury.

## CONNECTING THE DEVICE TO YOUR SMARTPHONE

- Select and open the RYOBI™ Phone Works™ app.
- Insert the device's plug into your smartphone's headphone jack.
- Turn the volume on your smartphone to its maximum setting.

**NOTE:** Some phones have features that limit the amount of volume available. Turn these features off before you attempt to use the device.

- Open the **LASER LEVEL** app segment.

Fig. 1

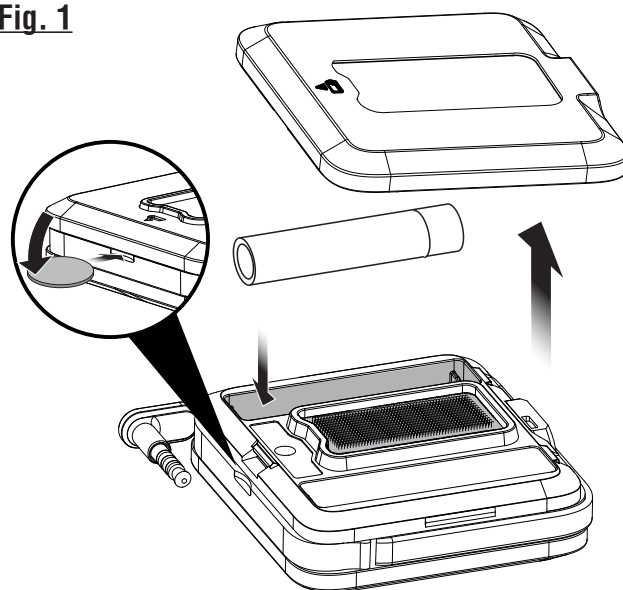
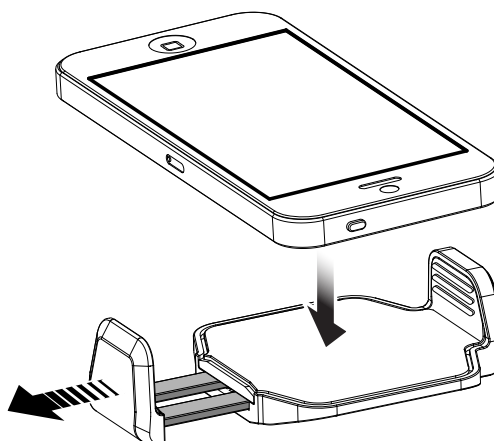


Fig. 2



## USING THE LASER LEVEL

See Figure 3.

### ⚠ DANGER:

Avoid direct eye exposure when using the laser and do not project the laser beam directly into the eyes of others. Serious eye injury will result.

- To obtain a plumb level, place your smartphone on the surface you want to reference and tilt it until the leveling circles are aligned.
- To obtain a horizontal level, hold your smartphone up-right or sideways and tilt it until the reference angle line is at 0° or 90°.

# OPERATION

**NOTE:** Depending on your device's settings, the laser angle line may blink and/or the laser beam may turn on when the desired angle is achieved.

## SETTING THE ANGLE

- Touching the screen and sliding up or down will allow you to set the green desired-angle line.
- Tapping the red arrows at the right side of the green desired-angle number allows movement up or down in 1-degree increments.
- To reset the desired angle to 0°, double-tap the green number displayed on the left side of the screen.

## TAKING A PICTURE

The RYOBI™ Phone Works™ app allows you to take a picture of the screen to save for future reference or share via email or social media. This function captures all settings displayed on the current screen. It will work with or without activating the smartphone's built-in camera.

- Tap the appropriate camera icon.
- Tap the large green button to take the picture on the screen.
- The picture just taken will appear on the screen.
- To save, swipe the picture toward the file cabinet.
- To delete, swipe downward and the picture will be deleted.

**NOTE:** Pictures will be saved into the project name at the top right of the screen. To save into another project, see *Managing Your Projects* below.

- Multiple pictures can be saved into each project.

## MANAGING YOUR PROJECTS

See Figure 4.

### To edit, delete or share your images:

Tap the project name. A menu appears displaying **Add New**, **Edit**, **Use Existing** or **Cancel**.

#### Add New

- Tap **Add New** and enter the name of your new project.
- Tap **Done** to return to the screen. Any screen shots or images saved will be stored under this new project name.
- To review images, tap the file cabinet icon. Tap the image to display the saved screenshot.

**NOTE:** If no images have been saved, you will receive a notice that no readings are available in this project. You must save an image before you can open to review.

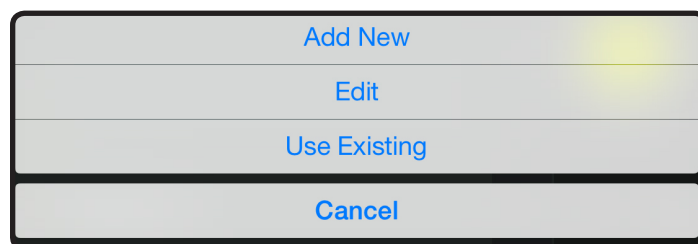
#### Edit

- Delete or add characters in the open project name and type in a new or revised name for your project.

**Fig. 3**

0°	Current angle of the projected laser beam
---	Reference laser angle line (current angle of laser)
0°	Desired angle being searched
▲ ▼	Adjust desired-angle line in one-degree increments
☼	Laser is on or off

**Fig. 4**



### Use Existing


- Scroll through the list of project names and select the one you wish to access.
- Tap **Done** to load the project.

## CREATING NOTES

Tap the notes icon in the top right corner of the projects screen. A menu appears displaying **Photos**, **Audio Memo**, **Location** and **Notes**.

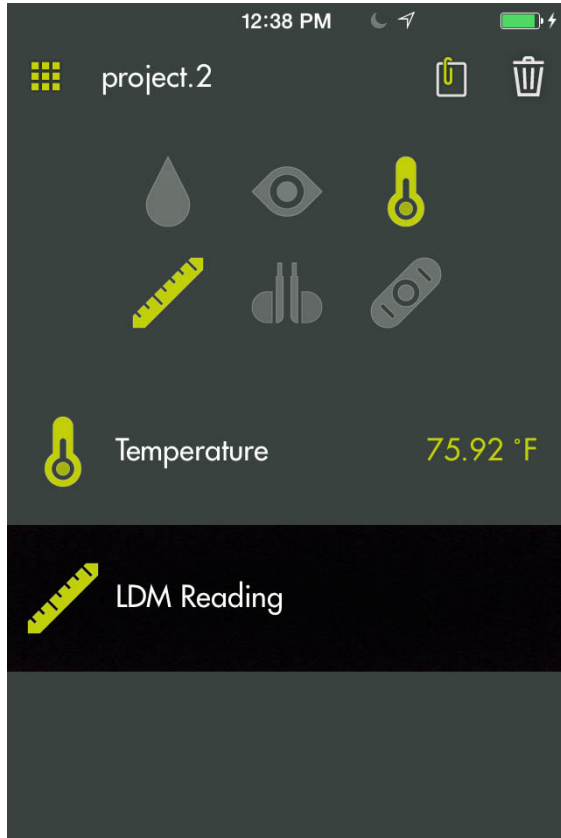
- Tap plus (+) for **Photos** to take a picture in the selected project or view current photos.
- Tap plus (+) for **Audio Memo** to record a voice memo of up to two minutes in the selected project. Tap the green button to begin recording. Tap again to stop.
- Tap plus (+) for **Location** and select **Use Current Location** to record your current location in the selected project. To edit or manually enter the location, tap plus (+) again to access the keyboard.
- Tap plus (+) for **Notes** to access the notes screen. Tap plus (+) again to access the keyboard.

## SHARING NOTES

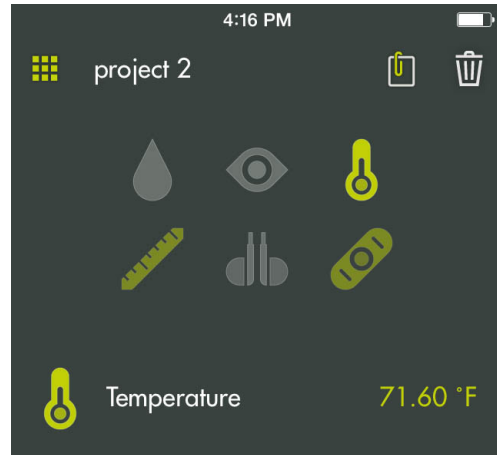
- Select the share icon .
- Select the share icon on each piece of data you wish to share.
- Select the share method.

# OPERATION

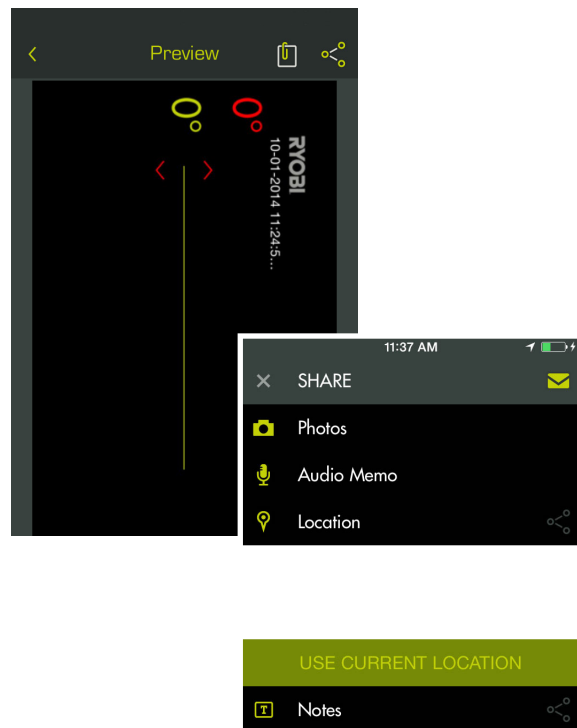
**Fig. 5**



**Fig. 6**



**Fig. 7**



## PROJECT FOLDER SUMMARY

See Figure 5.

- The file cabinet icon may be accessed from the RYOBI<sup>TM</sup> Phone Works<sup>TM</sup> home screen or from any app segment.
- Accessing the file cabinet from the home screen will display all projects and icons representing the app segments used for each project.

## PROJECT SUMMARY

See Figure 6.

- Accessing the file cabinet from within a project will display the app segments containing photos or data.
- Tap an icon to select or deselect an app segment within a project. When an app segment is selected, stored items will be visible.
- Tap a stored item to preview its details.

## SHARING PROJECTS

See Figure 7.

- To share the picture, tap the share icon ( ) to the right of **Preview**. A blank email opens with the image attached.
- Tap **Cancel** to save the email as a draft or delete the draft. Sending the email returns you to the **Preview** screen.
- To exit preview, tap the arrow to the left of **Preview**.



# OPERATION

## DELETING PROJECTS

See Figure 8.


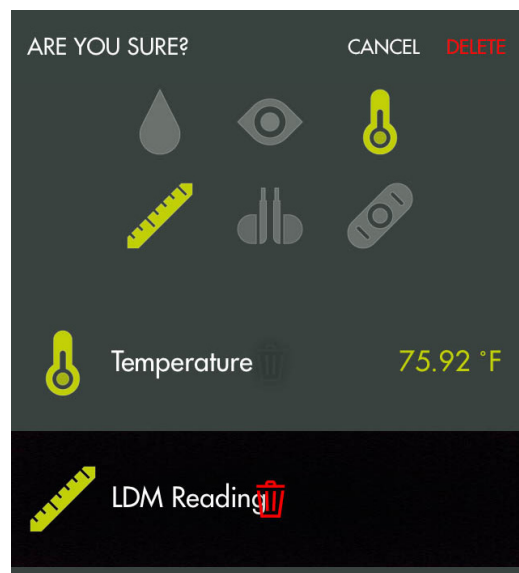
- To delete a project view, tap the trash can icon. Tap the project view(s) you wish to delete. A red trash can appears next to each item you have selected to delete. Tap **DELETE** . Tap delete again to remove the item.
- To delete an entire project across multiple devices, return to the RYOBI Phone Works™ home screen. Select the file cabinet icon and then select the project you wish to delete. Swipe to reveal the **DELETE** option and select **DELETE**.

Fig. 8



# MAINTENANCE

## WARNING:

When servicing, use only identical replacement parts. Use of any other parts could create a hazard or cause product damage.

## GENERAL MAINTENANCE

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, grease, etc.

## STORAGE

Store in a cool, dry location to prevent condensation or mold from forming inside the product.

Do not store the device at temperatures greater than 122° F (such as on a dashboard or vehicle interior).

## BATTERY RECYCLING

Consult the Earth 911 website ([www.earth911.com](http://www.earth911.com)) or your local waste authority for information regarding available recycling and/or disposal options.

## WARNING:

Do not attempt to destroy or disassemble batteries or remove any of their components. All batteries must be recycled or disposed of properly. Do not discard large amounts of used batteries together. “Dead” batteries often have residual charge. When grouped together, these batteries can become “live” and pose a risk of possible serious injury.

## CALIFORNIA PROPOSITION 65

## WARNING:

This product may contain chemicals, including lead, known to the State of California to cause cancer, birth defects, or other reproductive harm. **Wash hands after handling.**



# WARRANTY

## **RYOBI™ Phone Works™ – LIMITED 1 YEAR WARRANTY**

One World Technologies, Inc., warrants its RYOBI™ Phone Works™ products with the following conditions:

**WHAT THIS WARRANTY COVERS:** This warranty covers all defects in workmanship or materials in your RYOBI™ Phone Works™ for a period of one year from the date of purchase.

**WHAT'S NOT COVERED:** This warranty applies only to the original purchaser at retail and may not be transferred. This warranty only covers defects arising under normal usage and does not cover wearable parts, malfunction, failure or defects resulting from misuse, abuse, neglect, alteration, modification or repairs by other than RYOBI™ Phone Works™ Service Department. One World Technologies, Inc. makes no warranties, representations or promises as to the quality or performance of its power tools other than those specifically stated in this warranty.

**HOW TO GET SERVICE:** Return the RYOBI™ Phone Works™ Item to RYOBI™ Phone Works™ Service Department at the address below, freight prepaid. Insurance is required.

**RYOBI™ Phone Works™ Service Department**  
**1428 Pearman Dairy Road,**  
**Anderson, SC 29625**

When you request warranty service, you must also present proof of purchase documentation, which includes the date of purchase (for example, a bill of sale). We will repair any faulty workmanship, and either repair or replace any defective part, at our option. We will do so without any charge to you. We will complete the work in a reasonable time, but, in any case, within ninety (90) days or less.

For any additional questions or customer service please contact RYOBI™ Phone Works™ at 1-877-578-6736 or by logging on to [www.ryobitools.com/phoneworks](http://www.ryobitools.com/phoneworks).

**ADDITIONAL LIMITATIONS:** Any implied warranties granted under state law, including warranties of merchantability or fitness for a particular purpose, are limited to three years from the date of purchase. One World Technologies, Inc. is not responsible for direct, indirect, or incidental damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.